REMARKS/ARGUMENTS

Reconsideration is respectfully requested of the Office Action of January 27, 2005 relating to the above-identified application.

Claims 14 and 15 have been amended in order to remove an inadvertent mistranslation of the original text.

New Claims 29 and 30 are presented in order to make certain that all aspects of the invention are adequately protected. The claims in the case are Claims 1 to 30.

In view of the foregoing amendments, it is believed that the rejection of Claims 14 and 15 under 35 U.S.C. § 112, second paragraph, has been overcome.

The rejection of Claims 1-8 and 16-21 under 35 U.S.C. § 103(a) as unpatentable over the *Linde* patent (US 6,803,026), in view of the *Linde* patent (US 5,797,988) is traversed and reconsideration is respectfully requested.

The subject matter of the present application relates to a beaded carbon black containing at least one pelletizing additive such as a wax or a resin or a mixture of a wax or a resin and at least one synthetic oil.

The Official Action admits that the *Linde* patent '026 does not disclose the use of a synthetic oil. The Official Action relies on the second *Linde* patent, '988, for a showing of use of synthetic oils as a binder. The Official Action concludes that it would have been obvious to one of ordinary skill in the art to select synthetic oils and resins as the binder and dispersant of the carbon black pellets of the primary reference. Applicants respectfully submit that the Official Action fails to set forth any reason, suggestion, or motivation whereby a person skilled

in the art would be lead to incorporate a synthetic oil into the composition of the primary reference, *Linde*, '026.

Attention is invited to the comparative data in the present application, including Table 3 on page 9 of the application which shows Comparative Example 1 using just oil as the pelletizing agent and Comparative Example 2 using just wax as the pelletizing agent. In clear contrast to the two comparative examples, Example 3 according to the invention which uses a combination of oil and wax, as a pelletizing agent shows a clear and unexpected difference in properties such as individual bead hardness, a lower attrition mill dispersion at 15 minutes and good flowability of printing ink. The data from Table 3 is interpreted on page 12, beginning at line 13. Particular attention is invited to the discussion beginning at line 22 which points out that the beaded black according to the invention which is represented by Example 3 displays advantages over the oil pelletized carbon blacks shown in Comparative Example 1 and the wax pelletized carbon blacks shown in Comparative Example 2. The total bead hardness, a characteristic of the pigments including individual bead hardness and the bead strength, is clearly increased. The improvement in bead hardness and bead strength in comparison to the Comparative Examples 1 and 2 can be achieved while still retaining good dispersibility of the pellets.

At the top of page 13, it is point out that the dispersibility in attrition mill dispersion and flow behavior are improved in comparison to the carbon blacks produced only with oil or only with wax.

Thus, it is seen that the data in the application shows a synergistic effect that is an improvement that could not have been predicted based on the performance characteristics of the individual comparative examples.

The references relied on in the Official Action clearly would not suggest that such a significant difference would arise by using a combination of the pelletizing agents. Neither would the references enable a person skilled in the art to predict the success and performance characteristics of the combination of pelletizing agents as represented by Example 3.

Accordingly, it is respectfully submitted that no *prima facie* case of obviousness has been presented by the cited reference; and, assuming *arguendo* that a *prima facie* case of obviousness is presented, the data in the application clearly shows an unexpected result which rebuts any *prima facie* obviousness.

To establish a *prima facie* obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification. *In re Linter,* 458 F.2d 1013, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine,* 837 F2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones,* 958 F2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills,* 916837 F2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

A statement that the modifications of the prior art to meet the claimed invention would have been "'well within the ordinary skill of the art at the time the claimed invention was made'" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood,* 28 USPQ 2d, 1300 (Bd. Pat. App. & Int. 1993).

The indication of allowable subject matter as represented by Claims 9-13 and 22-27 (renumbered) is noted with appreciation.

It is also to be noted that the application as originally filed did indeed contain Claim 19 as shown by the copy of page 15 of the original claims which is attached hereto. Possibly the confusion arose because Claim 19 is indented and could have been easily overlooked.

Applicants request favorable consideration of the application and request the Examiner to call the undersigned to expedite disposition of this application.

Respectfully submitted,

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11. The process according to claim 9, wherein the retention time of the carbon black in the pelletizing mixture is from 20 to 600 seconds.

12. The process according to claim 9, wherein up to 60 wt.% of beaded black in the same grades of carbon black is added to the powdered carbon black as an inoculum.

13. The process according to claim 9, wherein the powdered carbon black is precompressed to a bulk density of 150 to 350 g/l before pelletization.

14. A rubber or plastic article containing the beaded black according to claim 1 as a filler and/or pigment in rubber and plastic articles and as a pigment for the production of printing inks.

15. A printing ink containing the beaded black according to claim 1 as a pigment. A method to improve the abrasion resistance of a printing ink comprising adding to said printing ink the beaded black according to claim 1.

16. The beaded black according to claim 1 which has a total bead hardness greater than 6 kg.

17. The beaded black according to claim 1 which has a total bead hardness greater than 7 kg.

18. The beaded black according to claim 1 which has a bead strength of the bead fraction of 0.5 mm - 0.71 mm greater than 7 KPa.

19. The beaded black according to claim 1 which has a bead strength of the bead fraction of 0.5 mm - 0.71 mm greater than 80 KPa.

20. The beaded black according to claim 1 wherein the bead strength of the of 0.71 mm - 1.00 mm bead fraction is greater than 60 Kpa.

21. The beaded black according to claim 1 wherein the bead strength of the of 0.71 mm - 1.00 mm bead fraction is greater than 68 Kpa.

22. The beaded black according to claim 1 wherein the carbon black has a DBP adsorption of between 40 and 250 ml/100 g and a nitrogen surface area of 5 to 500 m^2/g.

23. The process according to claim 8 wherein mixing takes place in a pelletizing machine with a pin shaft having pin tips wherein the speed of the pin shaft is such